

## MANIPULATING THE SIZE OF WAVEGUIDES WRITTEN INTO SUBSTRATES USING FEMTOSECOND LASER PULSES

### Abstract

Waveguides produced in bulk glass using femtosecond pulsed  
5 lasers have diameters and refractive index profiles that are  
manipulated by additional motions or beams. For example, spot  
focuses of the femtosecond pulsed lasers trace overlapping or widened  
tracks by superimposing additional relative motions between the spot  
focuses and the bulk glass. Additional femtosecond pulsed beams can  
10 also be used to produced widened waveguides.

00007751.412004